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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/626,555	07/25/2003	Nicolas Eches	CELA:104	9329
27890	7590	06/20/2005	EXAMINER	
STEPTOE & JOHNSON LLP 1330 CONNECTICUT AVENUE, N.W. WASHINGTON, DC 20036			CHAMBERS, TROY	
			ART UNIT	PAPER NUMBER
			3641	
DATE MAILED: 06/20/2005				

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>		<b>Applicant(s)</b>	
	10/626,555		ECHES ET AL.	
	<b>Examiner</b>		<b>Art Unit</b>	
	Troy Chambers		3641	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 03 February 2005.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) 9 and 10 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☒ Claim(s) 1-10 are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07/25/03 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

*gk*

## DETAILED ACTION

### *Drawings*

1. Figures 1 and 2 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-4 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Clarke et al (cited by applicant).

The reference in Fig. 2 shows a segmented sabot (col. 4, lines 3+) having three axially spaced support seals, element 38 in the rear, the middle support seat having band 36, and the forward support seat having element 50 (note that Fig. 3 in a related

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manner, also shows three axially spaced support seats (see col. 6, lines 43+). The elements are have a caliber that is "substantially equal" to that of barrel 40.

4. Claims 1-8 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Klumpp.

Note particularly Figs. 1 and 2 which show three axially spaced support seats respectively having bands 12, 9 and 11. Said Figs. 1 and 2 also show the rear and forward supports as being formed of radial arms or studs evenly space angularly around the sabot.

The English language abstract or summary states the forward support (front cage) can be made of composite plastic and fibre (applicant's claim 6 reads on such).

5. Claims 1-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bisping et al in view of either Klumpp or Clarke et al.

The claims differ over Bisping et al by reciting a third (forward) support seat. However, it was already an old an advantageous expedient in this art to provide a third (forward) support seat as evidenced for example by the teachings thereof in either Klumpp or Clarke et al and to so modify Bisping et al would according have been prima facie obvious. Note that such provides the obvious advantage of more stability for the projectile. The features of applicants claims 5 and 6 are no more than conventionally known advantageous features in this art and are accordingly prima facie obvious (such are even shown for example in the secondary reference of Klumpp).

***Response to Arguments***

6. Applicant's arguments filed 02/03/05 have been fully considered but they are not persuasive.

Applicant argues that the elements of Clarke are "sub-calibered" rather than being "substantially equal to the barrel caliber" as claimed. However, claim 1 merely requires that the dimension to relate to a barrel. A barrel is defined as "a drum or cylindrical part". Hence the casing 40 qualifies as a barrel.

With respect to the application of Klumpp, the applicant argues that the arrangement of a sabot dimensioned to have a caliber substantially equal to the caliber of a barrel for firing the penetrator is "nowhere disclosed or suggested in the cited reference".

However, the Examiner refers the applicant to Figs. 1 and 2 which show elements 9, 11 and 12 as being of substantially equal height so that all must have a caliber that is "substantially equal" to the caliber of the barrel.

Applicant further argues, "the presently claimed invention is ammunition is a single sub-caliber penetrator surrounded by a single, barrel caliber sabot having at least two segments." However, the Examiner can find no such limitation in the claims and, therefore, the cited prior art is not required to disclose such features. The applicant's use of the transitional phrase "comprising" does not exclude the presence of additional, unrecited elements in a prior art device. *Invitrogen Corp. v. Biocrest Mfg., L.P.*, 327 F.3d 1364, 1368, 66 USPQ2d 1631, 1634 (Fed. Cir. 2003)

Applicant further argues Klumpp does not disclose a forward support seat having a profile to cause separation of at least two segments from the sabot upon exit from the

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barrel. However, this is the inherent operation of all sabot-type penetrator devices. The sabot or supports are for driving the penetrator and are immediately removed when exiting a gun. Otherwise, the device would not work because of failure due to aerodynamic forces.

With respect to the application of Bisping, the applicant argues that the reference is lacking claimed subject matter as set forth in points (1), (2) and (3). Applicant further argues that the supporting references of Klumpp and Clarke do not disclose said subject matter. However, contrary to applicant's assertions, both Klumpp and Clarke disclose the subject matter not disclosed by Bisping as was discussed above.

### ***Conclusion***

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.


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8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Troy Chambers whose telephone number is (571) 272-6874 between the hours of 7:00 a.m. to 3:30 p.m., M-F. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael J. Carone, can be reached at (571) 272-6875.

Troy Chambers, Examiner

AU3641

TC

  
MICHAEL J. CARONE  
SUPERVISORY PATENT EXAMINER